State of Wisconsin/Department of Transportation

RESEARCH PROGRESS REPORT FOR THE QUARTER ENDING: Dec 31, 2003

Program: SPR-0010(36) FFY99	**Part: II Research and Development**
Project Title: Monitoring and Evaluation of a Fly Ash Stabilized Subgrade Constructed by the Wisconsin Department of Transportation	**Project ID:** 0092-04-10
Administrative Contact: Nina McLawhorn	**Sponsor:**
WisDOT Technical Contact: Error! Bookmark not defined.	**Approved Starting Date:** Jul 21, 2003
Approved by COR/Steering Committee: $84,603.00	**Approved Ending Date:** May 21, 2006
Project Investigator (agency & contact): Tuncer Edil: UW-Madison	

Description: This study will determine how fly ash stabilization for subgrade improvement impacts construction and pavement design parameters. It will allow field validation and refinement of the design and construction concepts developed in previous research by the PIs. The study will recommend pavement design parameters for fly ash stabilized soils and investigate impacts to the construction process. The results of the study will provide WisDOT with the basis for making informed policy decisions on inclusion of fly ash stabilization in pavement design and construction.
This Project includes the following phases:
Phase I - Development of Laboratory Testing and Field Monitoring Program
Phase II - Implementation of Data Collection and Monitoring Plan
Phase III - Long-term Monitoring

Total Study Budget	Current FFY Budget	Expenditures for Current Quarter	Total Expenditures to Date	Percent Complete
$84,603.00	**$21,150.75**	$10,451.04	**$10,451.04**	**10 (%)**

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Progress This Quarter:
(Includes project committee mtgs, work plan status, contract status, significant progress, etc.)
This report summarizes all activities since August 1 when we began to work on it to date. With the concurrence of Bob Arndorfer and Bruce Pfister we started a monitoring program at STH 32 northbound fly ash stabilization. We took a segment of STP 32 (611+50 to 615+50) and did the following:

1. We performed SSG, DCP and nuclear gage survey and sampling at 25-100 ft intervals of the graded subgrade prior to fly ash application.

2. During fly ash application we took samples of field mix and compact to Proctor, CBR and resilient modulus/unconfined compression molds and test them 7 and 28 days later (previous work showed that field mix test results are about 50 % of the lab mixes and we need to have a handle on this).

3. After mixing and compacting we performed SSG, DCP and nuclear gage surveys and cored (Shelby tube samples disintegrate upon extrusion) at the same 25-100 ft intervals of the fly ash stabilized layer at 24 hrs, 7 days and 28 days to perform lab resilient modulus/unconfined tests on the cores.

4. Arranged to have an FWD survey of the test section area after paving in September. It will be repeated next spring and fall (3 surveys over a limited length).

Work Next Quarter:
We performed some of the laboratory tests but we still have some background testing. We will analyze the results and expect to have a report on STH 32.

We need to identify a new project for Summer 2004.

Circumstances affecting progress/budget:

None

Gantt Chart:
The main project has not started but the STH 32 add-on is 75% complete.

Note: Gantt chart shown in State Fiscal Year Quarters